

### **REMARKS**

This responds to the Office Action dated February 7, 2008.

Claims 1, 6, 13, and 58 are amended. Claims 1-18, 25-27, and 58-61 are now pending in this application.

#### **Clarification on Election/Restrictions**

It is noted that neither the Restriction Requirement dated October 9, 2007, nor the Applicant's response to that Restriction Requirement filed on November 9, 2007, addressed claims 41-49.

In light of the Restriction Requirement and the response, Applicant respectfully submits that claims 41-49 should have been canceled without prejudice or disclaimer. Applicant reserves the right to reintroduce these canceled claims in one or more Divisional applications at a later date.

#### **In the Specification**

The specification has been amended to correct typographical errors. No new matter is introduced.

#### **§102/§103 Rejections of the Claims**

Claims 1-3, 6, 9, 13-14, 17-18, 25, 58 and 59 were rejected under 35 U.S.C. § 102(b) for anticipation by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Sweeney (U.S. Patent No. 4,996,984, herein "Sweeney").

#### **Claim 1**

Claim 1 has been amended to more clearly describe the recited subject matter.

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation or obviousness because the cited portions of Sweeney, alone or in combination with reasoning given in the Office Action, do not provide the claimed subject matter. For example, Applicant is unable to find in the cited portions of Sweeney, among other things, a controller adapted to determine a fundamental frequency of a

sampled signal by autocorrelating a function of a series of characteristic points each associated with a time of a lobe in a curvature series determined as a function of the sampled signal, as recited in claim 1. Applicant is also unable to find a reason in the Office Action that remedies this deficiency.

The Office Action states, in paragraph 4, that “Sweeney discloses a defibrillation method involving determining a fibrillation cycle through the use of autocorrelation techniques (Col. 4, line 36-59)”. However, Applicant is unable to find in the cited portions of Sweeney autocorrelating a function of a series of characteristic points each associated with a time of a lobe in a curvature series determined as a function of a sampled signal, as recited in claim 1. In other words, Applicant is unable to find that the alleged “autocorrelation techniques” use the curvature series and the characteristic points as recited in claim 1.

Applicant respectfully requests reconsideration and allowance of claim 1.

#### *Claims 2-3*

Claims 2-3 are dependent on claim 1, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 1 is incorporated herein to support the patentability of claims 2-3.

Applicant respectfully requests reconsideration and allowance of claims 2-3.

#### *Claim 6*

Claim 6 has been amended to more clearly describe the recited subject matter.

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation or obviousness because the cited portions of Sweeney, alone or in combination with reasoning given in the Office Action, do not provide the claimed subject matter. For example, Applicant is unable to find in the cited portions of Sweeney, among other things, generating a curvature series as a function of a sampled input signal, and establishing a series of characteristic points each corresponding to a time of occurrence of a lobe in the curvature series, as recited in claim 6. Applicant is also unable to find a reason in the Office Action that remedies this deficiency.

The Office Action states, in paragraph 4, that “Sweeney discloses a defibrillation method involving determining a fibrillation cycle through the use of autocorrelation techniques (Col. 4, line 36-59)”. However, Applicant is unable to find in the cited portions of Sweeney autocorrelating a function of a series of characteristic points each corresponding to a time of occurrence of a lobe in a curvature series, as recited in claim 6. In other words, Applicant is unable to find that the alleged “autocorrelation techniques” use the curvature series and characteristic points as recited in claim 6.

Applicant respectfully requests reconsideration and allowance of claim 6.

#### *Claim 9*

Claim 9 is dependent on claim 6, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 6 is incorporated herein to support the patentability of claim 9.

Applicant respectfully requests reconsideration and allowance of claim 9.

#### *Claim 13*

Claim 13 has been amended to more clearly describe the recited subject matter.

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation or obviousness because the cited portions of Sweeney, alone or in combination with reasoning given in the Office Action, do not provide the claimed subject matter. For example, Applicant is unable to find in the cited portions of Sweeney, among other things, using a processor to generate a curvature series as a function of a sampled input signal, and generating a series of characteristic points as a function of the curvature series, the characteristic points each associated with a lobe in the curvature series and having a time as a function of a time of occurrence of the lobe and a size as a function of an area of the lobe, as recited in claim 13. Applicant is also unable to find a reason in the Office Action that remedies this deficiency.

The Office Action states, in paragraph 4, that “Sweeney discloses a defibrillation method involving determining a fibrillation cycle through the use of autocorrelation techniques (Col. 4, line 36-59)”. However, Applicant is unable to find in the cited portions of Sweeney

autocorrelating a function of a series of characteristic points each associated with a lobe in a curvature series and having a time as a function of a time of occurrence of the lobe and a size as a function of an area of the lobe, as recited in claim 13. In other words, Applicant is unable to find that the alleged “autocorrelation techniques” use the curvature series and characteristic points as recited in claim 13.

Applicant respectfully requests reconsideration and allowance of claim 13.

#### *Claims 14 and 17-18*

Claims 14 and 17-18 are dependent on claim 13, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 13 is incorporated herein to support the patentability of claims 14 and 17-18.

Applicant respectfully requests reconsideration and allowance of claims 14 and 17-18.

#### *Claim 25*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation or obviousness because the cited portions of Sweeney, alone or in combination with reasoning given in the Office Action, do not provide the claimed subject matter. For example, Applicant is unable to find in the cited portions of Sweeney, among other things, generating a curvature series based on a sampled signal, and generating a series of characteristic points in the sampled signal, each characteristic point corresponding to a lobe in the curvature series and having a time corresponding to a time of occurrence of the lobe, as recited in claim 25. Applicant is also unable to find a reason in the Office Action that remedies this deficiency.

The Office Action states, in paragraph 4, that “Sweeney discloses a defibrillation method involving determining a fibrillation cycle through the use of autocorrelation techniques (Col. 4, line 36-59)”. However, Applicant is unable to find in the cited portions of Sweeney autocorrelating a function of the series of characteristic points each corresponding to a lobe in the curvature series and having a time corresponding to a time of occurrence of the lobe, as recited in claim 25. In other words, Applicant is unable to find that the alleged “autocorrelation techniques” use the curvature series and characteristic points as recited in claim 25.

Applicant respectfully requests reconsideration and allowance of claim 25.

*Claim 58*

Claim 58 has been amended to more clearly describe the recited subject matter.

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation or obviousness because the cited portions of Sweeney, alone or in combination with reasoning given in the Office Action, do not provide the claimed subject matter. For example, Applicant is unable to find in the cited portions of Sweeney, among other things, generating a first curvature series and a second curvature series based on a sampled signal, and generating a first series of characteristic points in the first sampled signal and a second series of characteristic points in the second sampled signal, each characteristic point corresponding to a lobe in a curvature series and having a time corresponding to a time of occurrence of the lobe, as recited in claim 58. Applicant is also unable to find a reason in the Office Action that remedies this deficiency.

The Office Action states, in paragraph 4, that “Sweeney discloses a defibrillation method involving determining a fibrillation cycle through the use of autocorrelation techniques (Col. 4, line 36-59)”. However, claim 58 does not recite autocorrelation.

Applicant respectfully requests reconsideration and allowance of claim 58.

*Claim 59*

Claim 59 is dependent on claim 58, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 58 is incorporated herein to support the patentability of claim 59.

Applicant respectfully requests reconsideration and allowance of claim 59.

*§103 Rejection of the Claims Using Sweeney*

Claims 4-5, 11-12, 15-16, and 61 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sweeney as applied above.

Applicant respectfully traverses the rejection.

Claims 4-5 are dependent on claim 1, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 1 is incorporated herein to support the patentability of claims 4-5.

Claims 11-12 are dependent on claim 6, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 6 is incorporated herein to support the patentability of claims 11-12.

Claims 15-16 are dependent on claim 13, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 13 is incorporated herein to support the patentability of claims 15-16.

Claim 61 is dependent on claim 58, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 58 is incorporated herein to support the patentability of claim 61.

Applicant respectfully requests reconsideration and allowance of claims 4-5, 11-12, 15-16, and 61

*§103 Rejection of the Claims Using Sweeney and Marcus*

Claims 7-8, 10, and 26-27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sweeney as applied above in view of Marcus (U.S. Patent No. 4,637,400. herein "Marcus").

Claims 7-8 and 10 are dependent on claim 6, which is believed to be allowable for at least the reasons set forth above. It is believed that the addition of Marcus does not remedy the deficiency of the rejection using Sweeney as discussed above for claim 6. Therefore, the discussion above for claim 6 is incorporated herein to support the patentability of claims 7-8 and 10.

Claims 26-27 are dependent on claim 25, which is believed to be allowable for at least the reasons set forth above. It is believed that the addition of Marcus does not remedy the deficiency of the rejection using Sweeney as discussed above for claim 25. Therefore, the discussion above for claim 25 is incorporated herein to support the patentability of claims 26-27.

Applicant respectfully requests reconsideration and allowance of claims 7-8, 10, and 26-27.

**CONCLUSION**

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6965 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

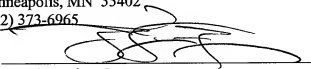
Respectfully submitted,

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Date

May 7, 2008

By

  
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**CERTIFICATE UNDER 37 CFR 1.8:** The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 7 day of May 2008.

Name

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Signature

